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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,093	05/02/2001	Henry Michaels Beisner		5735

7590 03/14/2003

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EXAMINER

ANDREA, BRIAN K

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,093

Applicant(s)

BEISNER, HENRY MICHAELS

Examiner

Brian K Andrea

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-13 (claims 1-7 have been cancelled) is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The amendment filed 25 November 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

-The explanation of the coefficients and how they are determined on pages 11, 12, 20, 22 and 23 of the amended specification.

-The mathematics for determining the coefficients on pages 25-27 of the amended specification.

-The mathematics for removing the multi-path and restoring the original signal on pages 28-32 of the amended specification.

-Any explanation of the figure or apparatus submitted in the amended specification that is not enabled by the original specification or figure (i.e. can easily be deduced by examining the figure alone) is taken as new matter. Examples of this are located on pages 11, 15, 16, 17, 18 and 20.

2. Applicant is required to cancel the new matter in the reply to this Office Action.

3. The figure submitted with the amended specification is improper because figures may not be incorporated into the body of the specification. The following are guidelines for submitting amended figures:

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

Art Unit: 3662

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

4. The original disclosure is still objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. Applicant's arguments on pages 2-5 of the amendment are insufficient because they do not point out where in the *original disclosure* the items alluded to by the examiner are located. The submission of the substitute specification does not alleviate this objection because of the new matter issue raised above. For example, the following items are still not understood in the original specification:

It is unclear exactly how the present invention may be made or used. The Detailed Description is insufficient in providing an adequate disclosure of the present invention. For example, an application of filter weights is discussed on page 4, paragraph 4 but no discussion of how the filter weights are calculated and how they are applied is provided. It is stated that the present invention "removes the multi-path noise from the received signal" on page 4, paragraph 5 but it is unclear where the discussion of the removal of the multi-path is discussed. Paragraph 6 appears to describe the receiving and sampling of the signal but it is unclear how this removes the multi-path from the signal or why it is important in the present invention. Pages 5 and 6 provide equations that appear to teach how the multi-path is removed but it is difficult to understand how and why these equations are applied without a written description as to their relation to the present invention.

When the figure is referred to, it is unclear exactly what parts of the figure are being referred to without the use of reference numbers or labels. For example, it is unclear what part is to be labeled "residual" and a low pass filter is discussed on page 4, paragraph 6 but no low pass filter appears to be in the figure. It is difficult to follow the specification without specific reference to items in the figure.

On page 4, paragraph 6, it is unclear whether the referral to numbered references is meant to incorporate the references into the disclosure of the present invention. If they are not meant to be incorporated by reference, it is unclear why they are cited.

5. NOTE TO APPLICANT: Even if the amended specification were to be entered, there would still be problems with 35 U.S.C. 112 1st paragraph. For example, the following items are not understood:

Page 11 discusses several different types of signal and refers to several of them with the same reference numeral (17). It is discussed on page 11 that signal 17 is fed into delayers 11 and frequency shifters 16 however, it is unclear from the figure how this is possible.

Page 21 discusses signal 10 being fed into filters 11 however it is unclear how this may happen from the figure.

Equations 15, 16, 17, 20, 21 and 22 are provided to show how the filter weights are determined however it is unclear from this mathematical explanation exactly how these filter weights are used or why they are determined.

Equations 17 and 23-32 have been provided to show how the removal of the multi-path in the received signal works however a written description of the process of multi-path removal is required. It is unclear exactly how the invention removes the multi-path from the signal because the function of each device singly and the interaction of the different devices with each other is not explained.

The mathematical explanations provided do not help in the understanding of the invention and minimal direction on the implementation of this math is provided.

Applicant's conclusion that this math enables the claims is not warranted.

6. The incorporation by reference of the references cited on pages 39 and 40 is objected to because it is improper. Applicant is advised that essential subject matter

can not be incorporated by reference. It is not clear exactly what part of each reference is being incorporated by reference. Additionally, non-patent literature may not be incorporated by reference because it is not readily available.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims are generally read in light of the specification and in this case, the specification is needed to interpret the claims. The claims are unclear and no examination is possible because the specification is incomprehensible.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references cited on form PTO-892 have been cited to show the current state of the art regarding multi-path cancellation.

10. Applicant is advised that a Continuation In Part may be filed in order to add the new matter alluded to above and to overcome the objections to the specification and the rejections under 35 U.S.C. 112.

11. An examination of this application reveals that applicant is unfamiliar with patent prosecuting procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skillful preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

For general information concerning patent prosecution and the identification of local patent attorneys and agents, the Patent Assistance Center can be reached at 1-800-786-9199.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Andrea whose telephone number is (703) 605-4245. The examiner can normally be reached on M-F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (703) 306-4171. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

BKA

BKA

March 6, 2003



THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600